

REMARKS

Claims 1-7, 13 and 14 are being rejected under 35 U.S.C. § 102(e) as being anticipated by **Taniyama et al.** (U.S. Patent No. 6,247,479) (hereinafter “**Taniyama**”).

Independent claim 1, and claims 2-7 dependent thereupon, recite a substrate processing apparatus for removing an organic matter from a substrate comprising a gas supplying section for supplying an inert gas to a surface of the substrate at least substantially concurrent with a supply of said remover to said substrate. Independent claim 13, and claim 14 dependent thereupon, similarly recite a substrate processing method for removing an organic matter from a substrate comprising the step of supplying an inert gas to a surface of the substrate substantially concurrently with the step of supplying a remover.

Taniyama teaches a conventional successive flow process including a cleaning process utilizing a chemical solution (see, e.g., step S3; Fig. 12; col. 9, lines 14-22), a rinsing process utilizing pure water (see, e.g., step S4; Fig. 12; col. 9, lines 23-31), and subsequent drying process utilizing IPA and nitrogen gas (see, e.g., step S5; Fig. 12; col. 9, lines 32-49).

Taniyama fails to teach (or suggest) a gas supplying section for supplying an inert gas to a surface of the substrate at least substantially concurrent with a supply of said remover to said substrate (claims 1, 2-7) or a substrate processing method for removing an organic matter from a substrate comprising the step of supplying an inert gas to a surface of the substrate substantially concurrently with the step of supplying a remover (claims 13-14). Instead, **Taniyama** merely supplies nitrogen gas during a drying process subsequent to the cleaning process and rinsing process. Accordingly, the process and apparatus of **Taniyama** will still yield, as noted in Applicant’s specification, the quality change of a thin film on the substrate as a result of reaction between the thin film on the substrate surface, an atmospheric component, and the chemical

solution. Anticipation under 35 U.S.C. § 102 requires that the identical invention be shown in the asserted reference in as complete detail as is contained in the claims. See, e.g., *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). **Taniyama** does not identically teach each element of the rejected claims and is not anticipatory thereof. Withdrawal of this 35 U.S.C. § 102(e) rejection is therefore requested.

Claim 8, which depends from claim 1, is rejected as being obvious under 35 U.S.C. § 103(a) over **Taniyama** in view of Sato et al. (U.S. Patent No. 4,968,375) (hereinafter “**Sato**”).

Taniyama is acknowledged by the Examiner not to teach slit-like gas blow ports. **Sato** is cited for teaching an etching apparatus with slit-like ports 15 and a valve 18 which opens to discharge nitrogen outwardly from the ports (citing col. 6, lines 38-45).

Sato fails to teach or suggest “a gas supplying section for supplying an inert gas to a surface of the substrate at least substantially concurrent with a supply of said remover to said substrate,” as claimed, and is therefore unable to make up for the deficiencies of **Taniyama**. Further, **Sato** fails to teach or suggest a gas supplying section provided with a nozzle having a slit-like gas-blowing port for blowing an inert gas along the surface of the substrate,” as claimed. Instead, the cited “slit-like ports” are merely exhaust holes 15 provided on a vacuum chuck 11, as shown in Fig. 2B. As noted in **Sato**, the exhaust holes 15 “communicate with the hollow portion 14 of the first vacuum chuck 11” (col. 5, lines 66-68). Thus, **Sato** fails to teach or suggest each and every element of claim 8 and fails to render obvious claim 8. Withdrawal of this rejection is requested.

Claim 15 and 16, which depend from claim 14, are rejected as being obvious under 35 U.S.C. § 103(a) over **Taniyama** in view of Tran et al. (U.S. Patent No. 6,453,916) (“**Tran**”).

Tran is cited for a teaching of various types of organic matters generated on a substrate as a result of physical or chemical reactions which yield known subjects requiring removal and particularly for a teaching of an apparatus and method of edge bead removal of photolithography resist processes. However, like **Taniyama**, **Tran** fails to teach or suggest a substrate processing method for removing an organic matter from a substrate comprising the step of supplying an inert gas to a surface of the substrate substantially concurrently with the step of supplying a remover. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974). For at least the reason noted above, **Taniyama** and **Tran** fail to teach or suggest, singly or collectively, each element of the claimed invention. Accordingly, withdrawal of this rejection is requested.

In view of the foregoing, it is submitted that the claims are allowable over the cited art and rejections of the September 16, 2003 Office Action. Allowance of claims 1-19 is solicited.

New claims 17-19 depend from independent claims 1 and 13 and provide additional limitations, for which support may be found in Applicant's specification.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, and please credit any excess fees to Deposit Account 500417.

Respectfully submitted,

MCDERMOTT, WILL & EMERY



William D. Pegg
Registration No. 42,988

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 WDP/SAB:kap
Facsimile: (202) 756-8087
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